8 Port USB Console KVM Switch with Audio

SV831DUSBA

Instruction Manual

STARVIEW

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FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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Introduction

Thank you for purchasing a StarTech.com 8 Port USB Console KVM Switch with Audio. This product offers a reliable and efficient way to manage multiple computers in server rooms, or any other environment where space is at a premium and provides the added benefit of audio switching capability.

Features

- Auto-scan function automatically selects computers sequentially
- Cascade configuration expands system capability
- Hotkey functions allow easy computer access/switching
- Identifies and selects computers by name assignment
- OSD security option protected against unauthorized computer use
- Unique cables offer convenient, space-saving connections

Package Contents

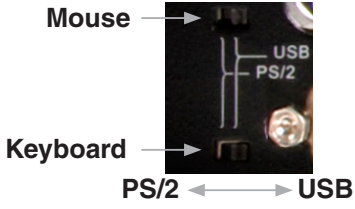
- 1 x Mounting Bracket
- 1 x Power Cord
- 1 x PS/2 keyboard and mouse Y cable
- 1 x StarView 8 Port KVM Switch
- 1 x User Manual

Installation

Warning: Prior to installation, please ensure that all computers and KVM switch(es) are powered down.

Device Connection

The SV831DUSB is designed for use with both USB and PS/2 console connections, and is equipped with two slide switch console selectors used for the selection of USB or PS/2 modes for the mouse and keyboard (shown below).



There are three connection patterns that correspond with the slide switch as follows:

1. **PS/2 Keyboard and PS/2 Mouse:** A PS/2 Y-connector (provided) will be required for this connection to allow both the mouse and keyboard to be connected to the PS/2 port. The mouse and keyboard slide switches must be switched to the left.

2. PS/2 Keyboard and USB Mouse: The mouse slide switch must be switched to the right, while the keyboard slide switch must be switched to the left.

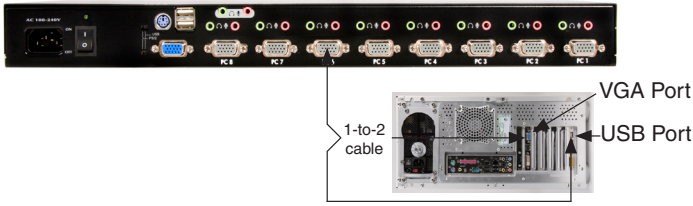
3. USB Keyboard and USB Mouse: Both the keyboard and mouse switches must be switched to the right.

Please note: When configuring the switch as a slave in a cascaded configuration, PS/2 Keyboard and Mouse is the only mode that can be used. As such, SV431DUSB cannot be configured as a slave in a cascaded setup, as it does not provide a slide switch selector.

Connecting Computers to the Console

USB Only

To connect a computer controlled by USB peripherals, use a 1-to-2 cable (SVECONUSx) to connect from one of the PC Ports located on the rear panel of the KVM switch to the USB and Video ports on the computer, as shown below.



PS/2 Only

To connect a computer controlled by PS/2 peripherals, use a 1-to-3 cable (SVECONx) to connect from one of the PC ports to the PS/2 keyboard and mouse, as well as the video port of the computer.

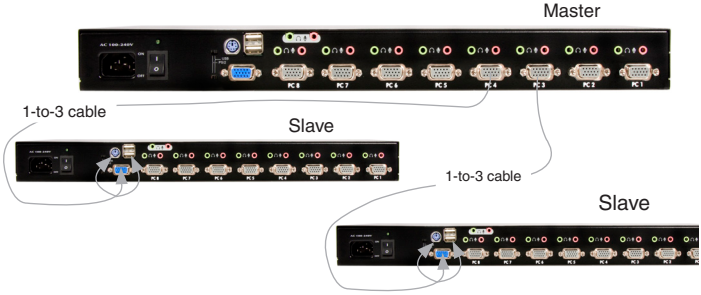
Cascaded Configurations

Please note: The master KVM Switch must have equal or more PC x ports than that of the slave kvm unit. For example, if an 8-port switch is the master, an 8-port or 4-port switch can be a slave, but not a 16-port switch.

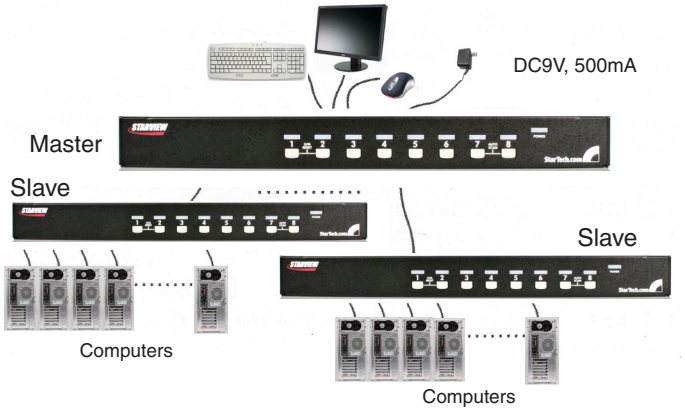
Please note: PS/2-only models can be cascaded with USB+PS/2 universal models.

Please note: To be used as slaves in a cascaded configuration, the slide switch on SV831DUSBA must be adjusted to PS/2 mode.

The ports labelled **PC 1** - **PC 8** can be connected to either a computer or a slave unit CONSOLE port, as shown below. Use only 1-to-3 (PS/2) cables to connect the master's PC ports and slave CONSOLE port, as shown below.



The maximum number of computers controlled by a master/slave configuration with all 8-port units is 64, including 8 slaves and each slave unit connecting to 8 computers as depicted below:



Operation

You may select a computer by pressing the front panel push button directly, by issuing hot-key commands or by activating the OSD window. The front panel indicator changes to reflect the computer port selected (red) and whether the port is connected to a powered computer (green). The indicator flashes red when it is in either *Auto Scan* or *Manual Scan* mode.

Push Button controls

To select control of an attached computer, press the front panel button that corresponds with the assigned computer number. For 16 port models, 1 to 8 represents the lower 8 ports, while A to H indicates the higher ports. Ports 1 and A share the same pushbutton, as do 2 and B, 3 and C etc.

Example: If port 1 is already selected and you wish to switch to Port A, tap the shared pushbutton once to select Port A. If Port 1 is not selected, press and hold pushbutton 1 for two seconds to select Port A.

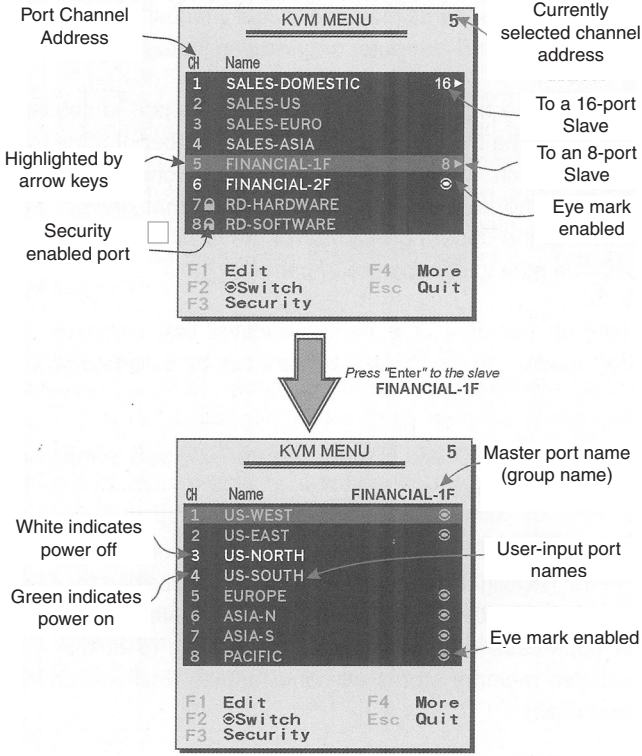
K/M Reset

K/M Reset resolves the majority of problems developed by keyboard and/or mouse device replacement or configuration changes. Press down buttons 1 and 2 simultaneously for 2 seconds to reconfigure the whole system without having to turn off the KVM switch or any attached computers.

Auto Scan

This KVM switch provides an easy to use feature to start Auto Scanning. To use this function, simultaneously press buttons 7 and 8 and hold for two seconds. (SV431DUSB uses buttons 3 and 4 to launch this function).

OSD (On Screen Display) Operation



By hitting the left **<CTRL>** key twice within two seconds, you may see the 'Hotkey Menu' if it is enabled (an OSD option). Or, by hitting the left **<CTRL>** key three times within two seconds, you will see a 'KVM MENU' screen displaying a list of the computers with corresponding channel addresses, names and status.

The channel address (port number) of the currently selected computer is displayed in red, same as the front indicator, to the right of the OSD title 'KVM MENU'.

The color of a device name is green if it has power and is ready for selection (its corresponding front panel indicator is green),or the color is white as it has no power.

OSD menu updates the color when it is activated.

Use the **<UP>** and **<DOWN>** arrow keys to highlight a computer and the **<ENTER>** key to select it. Or, you may press **<ESCAPE>** to exit the OSD and remove the OSD menu from the display; the status window returns to the display and indicates the currently selected computer or operating status.

A triangle mark (►) to the right of a name indicates the port is cascaded to a slave switch; the number at the left of the triangle mark indicates the number of ports the slave has, (i.e. 8 for SV831DUSBA). The **<ENTER>** key brings you one level down and another screen pops up listing the names of the computers on that slave. The name of the slave will be shown at the upper right corner of the OSD menu. It is useful to group computers and still be able to see the group name.

An eye mark (👁) to the right of a name indicates the computer is selected to be monitored in *Scan mode*. In the OSD, this mark can be switched on or off by function key **<F2>**.

Press the **<ESCAPE>** key to exit the OSD and to return to the selected computer, the computer name is also shown on the screen.

Function key **<F1>**: To edit the name entry of a computer or a slave, use the **<UP>** and **<DOWN>** arrow keys to highlight a channel, then press **<F1>** followed by name entry. Valid characters are '**A**'~'**Z**', '**0**'~'**9**' and the dash character. Lowercase letters are converted to uppercase ones.

Press the **<BACKSPACE>** key to delete a letter one at a time. Non-volatile memory stores all name en tries until you change them, even if the unit is powered down.

Function key **<F2>**: To switch the eye mark (👁) of a computer on or off.

First, use the **<UP>** and **<DOWN>** arrow keys to highlight it, then press **<F2>** to switch it's eye mark on or off. If *Scan Type* is 'Ready PC + 👁', only the power-on and eye mark selected computers will be displayed sequentially in Scan mode.

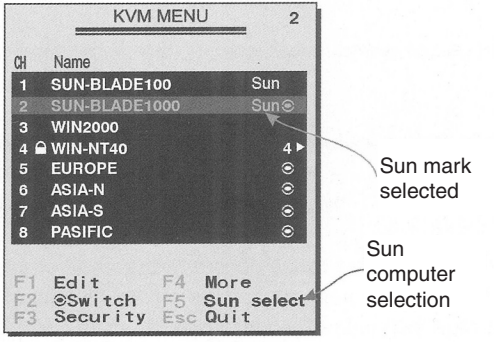
Function key **<F3>**: To lock a device (a computer or a slave) from unauthorized access, use Security. Security is effective for only one device (a computer or a slave). Use the <**UP**> and <**DOWN**> arrow keys to highlight it, then press <**F3**>. Now, enter up to 4 characters ('**A**'~'**Z**', '**0**'~'**9**', '**-**') followed by <**ENTER**> as new password. A Security enabled device is marked with a lock (🔒) following its channel number. To permanently disable the security function from a locked device, highlight it, press <**F3**> then enter the password.

If you want to access the locked device temporarily, simply highlight it and press <ENTER>, the OSD will ask you for the password. After entering the correct password, you are allowed to use the device. This device is automatically re-locked once you switch to another port. During *Scan mode*, OSD skips the security-enabled device.

NOTE: If you forget the password, the only way to permanently erase all of the passwords is to press and hold the 1 and 2 front panel buttons, then hold 7 and 8. Release 7 and 8, then release 1 and 2.

Function key **<F4>**: More functions are available by hitting <**F4**>. A new screen pops up displaying more functions as described below. Most of them are marked with a triangle (►) indicating there are options to choose from. Using the <UP> and <DOWN> arrow keys, select the functions and press <**ENTER**>. Available options will be shown in the middle of the screen. Again, use the <**UP**> and <**DOWN**> arrow keys to view options then press <**ENTER**> to make your selection. You can press <**ESCAPE**> to exit.

Function Key **<F5>:** To switch the Sun mark of a port on or off indicating the computer is a Sun server as shown below. Sun servers have more keys on the keyboard than a PC. When a Sun-marked port is selected, the KVM Switch starts to translate the keys from a PC keyboard to a Sun keyboard. See the section entitled Sun Keyboard Mapping for further detail.



Please note: It is unnecessary to switch the Sun mark ON or OFF if an authentic Sun keyboard is being used on the console. In other words, you must ensure that the Sun-marked port has not been selected if you are already using a Sun keyboard.

With different types of keyboard and computer, the Sun Mark must be set up in compliance with the following instruction:

Keyboard Type	Computer Type	Sun Mark
PS/2	PC/Mac	No
PS/2	Sun	Yes
USB (non-Sun)	PC/Mac	No
USB (non-Sun)	Sun	Yes
USB-Sun	PC/Mac	No
USB-Sun	Sun	Yes

Auto Scan

In this mode, the KVM Switch automatically switches from one power-on computer to the next, sequentially, in a fixed interval. During AutoScan mode, the OSD displays the name of the selected computer.

When Auto Scan detects any keyboard or mouse activity, it suspends the scanning until activity stops; it then resumes with the next computer in sequence.

To abort Auto Scan mode, press the left <**CTRL**> twice, or, press any front button.

Scan Type and Scan Rate set the scan pattern. Scan Type (<F4>: More\ Scan Type) determines if scanned computers must also be eye mark selected. Scan Rate(<F4>: More\Scan Rate) sets the display interval when a computer is selected before selecting the next one.

Manual Scan

Scan through power-on computers one by one by keyboard control. You can type (**<F4>: More\Scan Type**) to determine if scanned computers must also be eye mark selected.

Press the up arrow key (↑) to select the previous computer and the down arrow key (↓) to select the subsequent computer. Press any other key to abort Manual Scan mode.

Scan Type:

Ready PC + 👁: In Scan mode, scan through power-on and eye mark selected computers. Ready PC: In Scan mode, scan through power-on computers. The non-volatile memory stores the Scan Type setting. Scan Rate Sets the duration of a computer displayed in Auto Scan mode. The options are 3 seconds, 8 seconds, 15 seconds and 30 seconds. The non-volatile memory stores the Scan Rate setting.

Ready PC: In Scan mode, scan through power-on computers.

- ***only:*** In Scan mode, scan through any selected computer regardless of computer power status. The non-volatile memory stores the Scan Type setting.

Scan Rate: Sets the duration of a computer displayed in Auto Scan mode.

The options are 3 seconds, 8 seconds, 15 seconds and 30 seconds. The non-volatile memory stores the Scan Rate setting.

Keyboard Speed: SV831DUSBA offers keyboard typematic setting that overrides similar settings in BIOS and in Windows. Available speed options are Low, Middle, Fast and Faster as 10, 15, 20 and 30 characters/second respectively. Keyboard settings are stored in non-volatile memory.

Hotkey Menu: When you hit the left <CTRL> key twice within two seconds, the Hotkey Menu appears displaying a list of hotkey commands if the option is On. The hotkey Menu can be turned Off if you prefer not to see it when the left <CTRL> key is hit twice. The non-volatile memory stores the Hotkey Menu setting.

CH Display:

Auto Off: After you select a computer, the channel address and name of the computer will appear on the screen for 3 seconds then disappear automatically.

Always On: The channel address and name of a selected computer and/or OSD status displayed on the screen all the time. The non-volatile memory stores the CH Display setting.

Position: The position of the selected computer name and/or OSD status displayed on-screen during operation. The actual display position shifts due to different VGA resolution, the higher the resolution the higher the display position. The non-volatile memory stores the Position setting.

Upper Left, Upper Right, Lower Left, Lower Right, Middle.

Country Code for Sun: Sun keyboards of different languages have

different layouts. The KVM switch is able to emulate a Sun keyboard for a specific language type or country such as Arabic, Belgian, US, Yugoslavia, etc. Select the proper country code that matches all of your Sun computers.

Please Note: The country code must be set prior to powering up the Sun computer. Not performing this step prior to power-up could cause the system to malfunction.

Max. Resolution: You can adjust the monitor resolution under this sub-menu. The following selections are available: 1024 x 768, 1280 x 1024, 1600 x 1200, 1920 x 1440 and “DDC2B Disable”.

Hot-key commands

Hot-key commands are short keyboard sequences used to select a computer, to activate computer scan, etc. SV831DUSBA interprets keystrokes followed by one or two more keystrokes; a built-in buzzer generates a high-pitch beep for a correct hotkey command, otherwise, one low-pitch beep for an error and the bad key sequence will not be forwarded to the selected computer.

The short form hotkey menu can be turned on as an OSD function (**<F4>:More\Hotkey Menu**) every time the left <**CTRL**> key is pressed twice.

(Please Note: Left **<CTRL>**: designates the Control key on the left side of the keyboard.)

1~8: designate the number keys ‘**1**’~‘**8**’ in the upper row of the keyboard Do not use the keypad at the right of the keyboard.

To select a computer by hotkey command, you must know its port number, which is determined by the KVM Switch connection. For a computer connected to a slave, two characters represent its port - the first character is the port number of the master unit (1~8) and the second one is the port number of the slave (1~8).

Left <**CTRL**> , Left <**CTRL**>, **7** : Selects a computer connected to **port 7** of the master.

Left <**CTRL**> , Left <**CTRL**> **6**, **3** : Selects a computer connected to **port 3 of a slave** connected to port 6 of the master.

To start *Auto Scan*, automatically scan power-on computers individually at a fixed interval:

Left <**CTRL**>, Left <**CTRL**>, **F1**

When Auto Scan detects any keyboard or mouse activity, it suspends the scanning until the activity stops. It then resumes with the next computer in sequence. The length of the Auto Scan interval (Scan Rate) is adjustable.

To abort Auto Scan mode, press the left <**CTRL**> key twice.

Please Note: Scan Type determines whether an eye-marked computer is to be displayed during Auto Scan.

Manual Scan enables you to manually switch back and forth between the powered computers:

Left <**CTRL**>, left <**CTRL**>, **F2**

Press "↑", "↓"" to select the previous or the next computer in sequence. Press any other key to abort the Manual Scan.

Please Note: Scan Type determines whether an eye-marked computer is to be displayed during Auto Scan.

To adjust *Scan Rate*, which sets the duration before switching to the next computer in Auto Scan:

Left <**CTRL**>, Left <**CTRL**>, **F3**

The switch will beep one to four times indicating the scan interval of 3, 8, 15 and 30 seconds respectively.

To adjust keyboard typematic rate (characters/sec):

Left <**CTRL**>, Left <**CTRL**>, **F4**

The KVM switch beeps 1 to 4 times corresponding to 10, 15, 20 and 30 characters/second respectively.

Sun/Mac Keyboard Mapping

The KVM Switch emulates a Sun Keyboard when a computer is marked with a Sun, in the OSD menu by Function Key **F5**. A Sun keyboard has more keys than a standard PC keyboard. These extra keys are simulated by tapping the right **CTRL** button (normally located on the right lower part of the keyboard) followed by one of the function keys on the general keyboard (i.e. combo key). For example, tap the right **CTRL** key, and then tap the function key **F7** to activate **Open** for a Sun computer.

Please note: For older Sun Operating Systems, the switch does not support the *LowPower* option under *Power Off Select*.

For keystroke emulation of Sun/Mac computers, please refer to the chart on the following page and conduct the following two examples:

Stop A *function in Sun*: Press right **<CTRL>** and release, then within two seconds press **F1** and **A** in sequence.

The ***Help*** *function in Sun*: Press right **<CTRL>** and release, then within 2 seconds, press the **H** key.

From Standard Keyboard	Map to SUN Keyboard	Map to MAC Keyboard
Press **Right CTRL** and release; **1**		
Press **Right CTRL** and release; **2**		
Press **Right CTRL** and release; **3**		
Press **Right CTRL** and release; **4**		▷ Power
Press **Right CTRL** and release; **F1**	Stop	
Press **Right CTRL** and release; **F2**	Again	
Press **Right CTRL** and release; **F3**	Props	
Press **Right CTRL** and release; **F4**	Undo	
Press **Right CTRL** and release; **F5**	Front	
Press **Right CTRL** and release; **F6**	Copy	
Press **Right CTRL** and release; **F7**	Open	
Press **Right CTRL** and release; **F8**	Paste	
Press **Right CTRL** and release; **F9**	Find	
Press **Right CTRL** and release; **F10**	Cut	
Print Screen		**F13**
Scroll Lock		**F14**
Pause Break		**F15**
Press **Right CTRL** and release; **H**	Help	
Right ⊞	Right **+**	Right
Left ⊞	Left **+**	Left
	Compose	
Right **ALT** key	**ALT graph**	Right - *Option*
Left **ALT** key	**ALT**	Left - *Option*

Specifications

Maximum # of connected computers (Cascaded)	64
Maximum Video Resolution	1920 x 1440
Storage Temperature	-20° ~ 60° C
Storage Humidity	0-80% Humidity
Operating Temperature	5° ~ 40° C
Operating System Support	OS Independant (transparent)
# of KVM ports	8
KVM Interface	USB, PS/2
Connector Types	9 x DB15 High Density Female 2 x DIN 6 Female 18 x Phono 3.5 mm Female 2 X USB A Female
Power Adapter Input Voltage	115 VAC
Dimensions - H x W x L	45 mm (1.77”) x 180 mm (7.09”) x 540 mm (21.26”)
Weight	2.6 kg (91.78 oz)

Technical Support

StarTech.com's lifetime technical support is an integral part of our commitment to provide industry-leading solutions. If you ever need help with your product, visit www.startech.com/support and access our comprehensive selection of online tools, documentation, and downloads.

Warranty Information

This product is backed by a three year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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